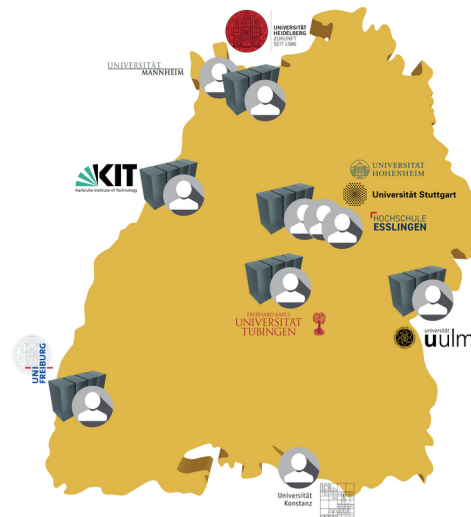


# Introductory Course 2023/10/16: HPC and Data Management @KIT

R. Barthel, M. Mesiti, F. Lingenhöl, P. Weisbrod, A. Baer, R. Laifer

Supported by: N. L. Tu, F. Bösert, H. Obermaier

All KIT, SCC



# Before Starting:

- List of attendance:
  - Write your name, university and sign it
  - Entitlement of bwUniCluster → no *or*  
Access to HoreKa → no
    - Write under „Notes“: „no access“

# Before Leaving:

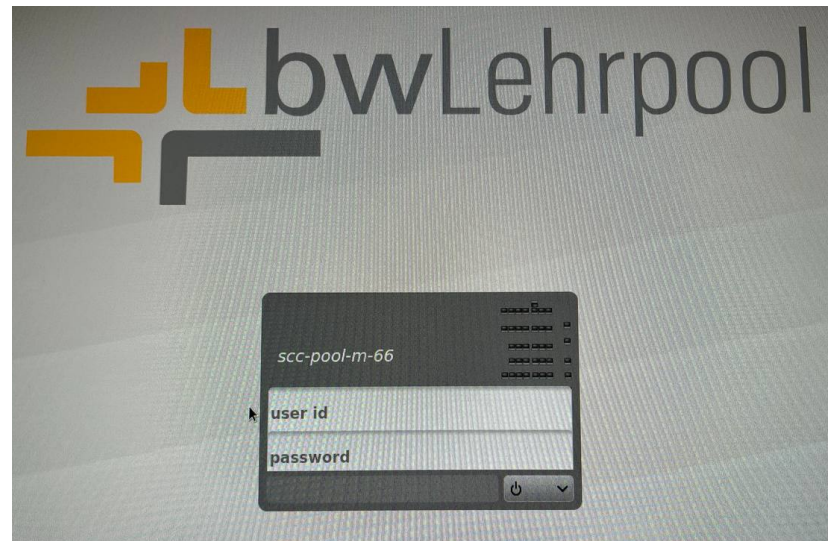
- Please fill the evaluation form:

The image shows a screenshot of an evaluation form titled "HPC in Baden-Württemberg" and "Introductory Course 2023/24". The form is divided into several sections:

- Header:** Includes logos for "EvaluSys", "HPC in Baden-Württemberg", "Erich-Popp", "einibuch Centre for Computing", "Dr. Robert Barthel", "Sturzbach Institut für Technologie", and "KIT".
- Form Information:** "for members:    Mark" and "Affiliation:    correction".
- Section 1: "Please rate the 'lecture for beginners' regarding the following aspects"**
  - 1. How do you rate the lecture for beginners as a whole? (very good to very bad)
  - 2. How is the lecture for beginners structured? (very high to very small)
  - 3. Knowledge gain (very limited to very high)
  - 4. Contents (very clear to very abstract)
  - 5. Clarity (so clear to so poor)
  - 6. Speed (very clearly to not at all)
  - 7. Do you understand the importance of the course contents to your work? (very adequate to very inadequate)
  - 8. Suitability of teaching and learning material (handouts) (very adequate to very inadequate)
- Section 2: "Please rate the 'tutorials for beginners' regarding the following aspects"**
  - 1. How do you rate the tutorials for beginners as a whole? (very good to very bad)
  - 2. How are the tutorials for beginners structured? (very high to very small)
  - 3. Knowledge gain (very limited to very high)
  - 4. Contents (very clear to very abstract)
  - 5. Clarity (so clear to so poor)
  - 6. Speed (very clearly to not at all)
  - 7. Do you understand the importance of the course contents to your work? (very adequate to very inadequate)
  - 8. Suitability of teaching and learning material (handouts) (very adequate to very inadequate)
- Section 3: "General Commentaries"**
  - 1. In particular, I like: (text input field)
  - 2. In particular, I did not like: (text input field)
  - 3. Would you recommend this course to others? (very much to not at all)
- Section 4: "Organisation"**
  - 1. Registration (very good to very bad)
  - 2. Service (very good to very bad)
  - 3. Coffee break (very good to very bad)
  - 4. How were you informed about this course? (online, printed booklet, making list, other)
- Section 5: "For our statistics, we need some more information"**
  - 1. Affiliation (type) (student, PhD student, employee (but not PhD student))

# Access Pool Computers (1)

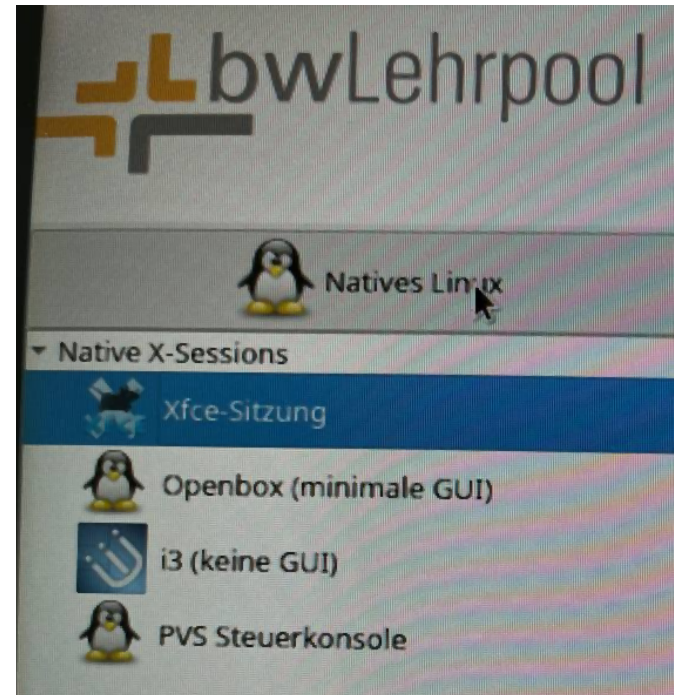
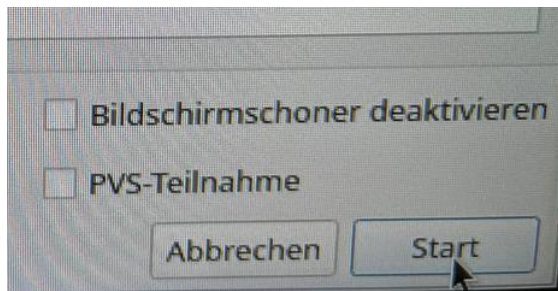
1. Reboot pool computer
2. Log in with your „User ID“ and home organization „password“
  - User ID = <university\_accountname@<email-domain>
    - e.g.: KIT: `xy1234@kit.edu`
    - e.g.: Uni Stuttgart `ac123456@uni-stuttgart.de`



# Access Pool Computers (2)

3. Choose „Natives Linux“
4. Choose from „Native X-Sessions“:
  - „Xfce-Sitzung“

## 5. Start Session



# Where to get the slides and exercises?

■ [https://indico.scc.kit.edu/indico/e/hpc\\_course\\_2023-10-16](https://indico.scc.kit.edu/indico/e/hpc_course_2023-10-16)

bwUniCluster: /opt/bwhpc/common/workshops/2023-10-16

HoreKa: /software/all/workshops/2023-10-16

■ exercises

■ slides

Overview  
Agenda  
Registration  
Contact  
✉ [courses@bwhpc.de](mailto:courses@bwhpc.de)

Das Steinbuch Centre for Performance Computing (SCPC) is a research center for high-performance computing (HPC) and data management (DM) at the University of Karlsruhe (KIT). The center provides a wide range of services and resources for researchers and students. The center is located at the Steinbuch Center for Performance Computing, 76131 Karlsruhe, Germany.

The Steinbuch Centre for Performance Computing course is aimed at (1) providing information about advanced HPC and DM techniques, and (2) providing hands-on experience with HPC and DM.

**Starts** 21 Oct 2023  
**Ends** 21 Oct 2023  
Europe/Berlin

exercises  
slides

# Course Agenda – October 16<sup>th</sup> 2023

09:30	→ 10:00	<b>bwHPC &amp; NHR: Concept, Infrastructure and Support</b>
10:00	→ 10:45	<b>Access procedure: bwUniCluster 2.0, HoreKa, bwForClusters (JUSTUS 2, Helix, NEMO, BinAC) incl. exercises</b>
10:45	→ 11:00	<b>Break</b>
11:00	→ 12:00	<b>Linux Introduction (CLI, Editors, etc): Linux introduction + Permissions</b>
12:00	→ 13:15	<b>Lunch Break</b>
13:15	→ 13:50	<b>Software Modules: UC2+HK</b>
13:50	→ 13:55	<b>Break</b>
13:55	→ 15:10	<b>Batch system introduction + Architecture incl. Exercise</b>
15:10	→ 15:20	<b>Break</b>
15:20	→ 16:00	<b>File systems</b>